

Interpreting nature's smoke signals no lost art on Refuge

by Doug Newbould

Can you interpret smoke signals? If you are old enough to read and understand this article, I'll bet you can.

Oh, I'm not talking about the kind of smoke signals we used to see in those old B-Westerns. I'm talking about the smoke we see and smell everyday here on the Kenai.

We all make observations about smoke, and we all react to it whenever we smell it or see it. I would even go so far to say that smoke is one of the most powerful signals we encounter in our environment, especially when you consider the effects it can have on us - both emotionally and physiologically.

How do you react to the smell of some savory meal smoking on the barbecue? How about the smell of a campfire on a cool summer evening? What kinds of thoughts go through your mind when you smell incense, or pipe smoke, or a cigarette in a restaurant?

Did I touch any nerves there?

OK, so what about your reaction to the smell of diesel smoke, burning tires, burning plastic or an electrical fire? Do you react in a certain way to different colors or amounts of smoke, or to its location in the atmosphere?

Sure you do. Thick, billowing clouds of black smoke are probably a lot more threatening to most people than soft, hazy white smoke...wouldn't you agree? I rest my case...I think we all interpret smoke signals, almost everyday.

As a wildland firefighter with the U.S. Forest Service and the U.S. Fish and Wildlife Service, I have been learning how to read smoke signals for almost 25 years. About ten years ago, I even completed a course in "smoke management".

Some of you know my boss, Larry Adams. Larry has been a Fire Management Officer on the Kenai for more than ten years, with the Alaska Division of Forestry and here on the Refuge. He has more than 35

years experience interpreting smoke signals. In fact his first job in natural resources was manning a fire tower in the Rockies, daily scanning the forests for the first wisps of smoke that signal the beginnings of a wildfire.

Larry also did a stint as a smokejumper, the most romantic of firefighting positions. Personally, I never understood what would possess a man or a woman to jump out of an airplane into a burning forest, risking life and limb. What's so romantic about that? I guess you'll have to ask him about that sometime.

When Larry and I look at the smoke from a wildfire or a prescribed burn, we can usually tell a lot about that fire: its size, its intensity, its rate of spread, or even the type of fuels that are burning. We can also make judgements about the weather by watching smoke: wind speed, wind direction, atmospheric stability, and the presence of inversions or approaching frontal systems.

We also use our noses to seek out those invisible fires, creeping slowly through the duff. We call them sleepers, because they can wake up days after a fire is thought to be out, or days after a lightning storm passes through an area. Sleepers have a very characteristic odor, usually just a delicate, slightly pungent aroma. You might even say we are smoke connoisseurs!

Those of you who know me, probably agree that I have the nose for the job (Mom always says it's a proud nose).

Both Larry and I would like to tell you more about fire management on the Refuge and perhaps about our firefighting careers...we love to tell "war stories". And remember, "Only You Can Prevent Wildfires!"

Doug Newbould is the Assistant Fire Management Officer at the [Kenai National Wildlife Refuge](#). He has lived happily in Kasilof with his wife Denise, son Brandon and daughter Megan since 1991.